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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/458,190	12/09/1999	BRADLEY CAIN	120-185	8564

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EXAMINER
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VO, LILIAN

ART UNIT	PAPER NUMBER
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2195

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11/27/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

09/458,190

Applicant(s)

CAIN, BRADLEY

Examiner

Lilian Vo

Art Unit

2195

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 July 0913.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 3 - 6, 8 - 11 and 13 - 15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3 - 6, 8 - 11 and 13 - 15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. Claims 1, 3 – 6, 8 – 11 and 13 – 15 are pending. Claims 2, 7 and 12 have been cancelled.

#### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 3 - 6, 8 - 11, and 13 - 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sand et al. (US 6,148,322, hereinafter Sand) in view of Applicant Admitted Prior Art (hereinafter AAPA).

4. As to **claim 1**, Sand teaches a computer implemented method for expediting a selected operation in a computer system (abstract: execute high priority task), the method comprising:  
associating a plurality of routing operations (communications instructions) with an operating system routing task (communications tasks), the plurality of routing operations including the selected operation (col. 3 lines 56 - 66);

executing the operating system routing tasks at a low priority level prior to performing the selected operation (col. 2 lines 52 – 55: low priority communications instructions received by

the high-priority communications tasks are then transferred to the low-priority communications task for processing. Col. 3 lines 61 – 65); and

raising the operating system routing task to a high priority level in order to perform the selected operation in response to a detection of a trigger condition indicating that the selected operation is to be performed (col. 2 lines 12 – 16: execute higher priority task upon the received satisfaction of the request condition. Col. 3 lines 61 – 63), wherein the raising the operating system routing task to the high priority level causes the operating system routing task to execute without being interrupted by at least one other operating system task running at the low priority (col. 2 lines 16 – 20, col.4 lines 18 - 29).

Sand did not clearly disclose the triggering condition comprises a link state advertisement protocol message. Nevertheless, a link state advertisement routing protocol message is considered well know and disclosed in AAPA on page 1 lines 19 – 31. Therefore, it would have been obvious for one of an ordinary skill in the art, at the time the invention was made to incorporate the link state routing protocol message concept with Sand to execute a high priority tasks based on the requested condition to ensure all such tasks are executed in timely fashion (Sand: col. 1 lines 6 – 18).

5. As to **claim 3**, as modified Sand teaches the operating system task is a routing task (Sand, col. 3 lines 56 – 66: communications tasks. AAPA, page 1) and wherein the link state advertisement protocol message includes link status information (AAPA: page 1 lines 19 - 24).

As to **claim 4**, as modified Sand teaches that when a node receives a LSA message, the node updates its topology information database by running a special algorithm to determine the routes based upon the updated topology information wherein a well-known algorithm for determining the routes is a Dijkstra shortest path algorithm (AAPA: pg. 1, lines 26-30).

6. As to **claim 5**, as modified Sand teaches lowering the operating system task to the low priority level upon completion of the selected operation (col. 2 lines 12 – 20, col. 4 lines 41 – 54: if the elapsed execution time is exceeded, the high priority task is aborted and will not be resumed until a user selected deactivation time elapsed).

7. As to **claims 6, 8 – 11 and 13 - 15**, they are rejected on the same ground as stated in claims 1 – 5 above.

#### ***Response to Arguments***

8. Applicant's arguments filed 9/13/07 have been fully considered but they are not persuasive for the reasons set forth below.

9. Applicant argues that Sands does not disclose or suggest changing the priority associated with a task (page 6 paragraph 4), the examiner disagrees. Examiner submits that the limitation as recited "executing...task at a low priority level...raising... task to a high priority level...causes the...task to execute without being interrupted by at least one other ...task running at the low priority" do not require the limitation to read on anything more than priority scheduling.

Typically, priority scheduling increases and decreases priority of a task when the task is selected for execution and released from execution. In this case, Sands clearly discloses that if the received communications instructions are high priority, the high priority task hpT processes the instruction itself; otherwise the high priority tasks transfer the instructions to a low priority communication task npKt for processing (col. 3 col. 58 - 67). In other words, if high priority task HpT contains low priority communications instructions, it still execute as a low priority after it is transferred to low priority communication npKt task.

Regarding applicant's remark that "Sands clearly stating that a different task of higher priority is being performed when a request condition is satisfied" (page 6 paragraph 5), the examiner agrees. It should be noted that this point is irrelevant since applicant's claimed invention is not limited to just one task having high priority. As stated above, priority scheduling increases and decreases priority of a task when the task is selected for execution and released from execution.

Furthermore, the examiner has interpreted the claim language as broadly as possible. It is also the examiner's position that applicant has not yet submitted claims drawn to limitations which define the method and system of applicant's disclosed invention in a manner that distinguishes over the prior art. Failure for applicant to significantly narrow definition/scope of the claims implies the applicant intends broad interpretation be given to the claims. The examiner thus maintains the previous rejections to applicant's claims with regard to the combination of Sand et al. with AAPA.

10. In response to applicant's argument (page 8 paragraph 2 - 3) that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation for the rejection is found in the prior art. It would have been obvious for one of an ordinary skill in the art, at the time the invention was made to incorporate the link state routing protocol message concept with Sand to execute a high priority tasks based on the requested condition to ensure all such tasks are executed in timely fashion (Sand: col. 1 lines 6 – 18).

11. In response to applicant's argument that "...there is no mention or suggestion that the communication bus is a local area network (LAN) bus which would use a link state protocol" (page 8 paragraph 3), when determining the motivation the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

12. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "communication bus is a LAN" (page 8 paragraph 3)) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

13. With respect to applicant's remark that the examiner's "conclusion fails to support the dynamic nature of task priorities of the present invention so that a routing task may have different priority given the demands of the system (page 8 paragraph 4), the examiner disagrees. Sands clearly discloses that if the received communications instructions are high priority, the high priority task hpT processes the instruction itself; otherwise the high priority tasks transfer the instructions to a low priority communication task npKt for processing (col. 3 col. 58 - 67). In other words, if high priority task HpT contains low priority communications instructions, it still execute as a low priority after it is transferred to low priority communication npKt task. Therefore, the received communications instructions (high or low priority) provides dynamic nature of task priorities based on the demands of the system.

14. With respect to applicant's remark that "in Sand, the priorities of the tasks do not change, rather just the current task that is executed changes according to its priority and the request condition" (page 8 paragraph 4), if applicant refers to the issue of changing of a task priorities, the examiner disagrees and responds to the remarks above in refuting the argument. Otherwise,



examiner submits that the limitation as recited in the claim do not require to have the priorities of other tasks other than just the one task to be changed.

### *Conclusion*

15. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lilian Vo whose telephone number is 571-272-3774. The examiner can normally be reached on Thursday 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on 571-272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Lilian Vo  
Examiner  
Art Unit 2195

lv  
November 22, 2007

  
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